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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,586	09/22/2003	Palanisamy Arjunan	2002B170	9631

23455 7590 06/16/2005

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EXAMINER

RABAGO, ROBERTO

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/667,586	ARJUNAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Roberto Rábago	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 30-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/7/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-29, drawn to polymerization process, classified in class 526, subclass 160.
- II. Claims 30-41, drawn to propylene polymer, classified in class 526, subclass 351.

The inventions are distinct, each from the other because:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process could be used to make polymers other than those specified in the polymer claims.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Ms. Catherine Bell on 6/3/2005, a provisional election was made with traverse to prosecute the invention of group I, claims 1-29. Affirmation of this election must be made by applicant in replying to this Office action. Claims 30-41 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Objections***

2. Claim 15 is objected to because at page 141, the drawn structure should occur after the line which introduces it.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-29 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 (and claims 2-29 by dependency) are indefinite because it cannot be determined whether the final clause is part of c) or whether it applies to all of a)-c). The use of the comma in c) in combination with indenting of the final clause appears to indicate that the final clause is part of c) only. The claim should be amended to clearly specify the intended meaning.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1-4, 7, 8, 11, 17, 20, 24-26 and 29 rejected under 35 U.S.C. 102(b) as being anticipated by Andtsjo et al. (US 6,084,041).

Examples 22 and 24 disclose supercritical polymerization of propylene at 94°C and 48 bar using metallocene catalyst, apparently using MAO as activator, including all claimed limitations.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5, 6, 9, 16, 18, 19, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andtsjo et al. (US 6,084,041).

The parent claims are discussed with respect to this reference above. Also recommended are pressures of 50-70 bar (col. 3, lines 52-55), comonomers (col. 5, lines 59-63), hydrogen (col. 5, line 55), ionic activator (col. 5, line 53), and loop reactors (col. 2, lines 60-64; furthermore, a loop reactor is inherently "tubular"). One of ordinary skill in the art would be motivated to use these alternative embodiments because patentee has suggested them as useful.

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9. Claims 12, 15 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andtsjo et al. (US 6,084,041) further in view of Fritze et al. (US 6,124,231).

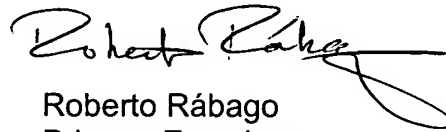
The parent claims are discussed with respect to this reference above. Regarding the claimed activators, the reference suggests ionic activators at col. 5, line 53, and those of ordinary skill in the art are well aware that such activators correspond primarily to conventional bulky borates (see Fritze col. 20-22, example 14). Regarding metallocene, the reference has suggested use of at least common bis-Cp (col. 5, lines 45-54) and bis indenyl (Examples 22 and 24) metallocenes, and analogs thereof. Fritze discloses a lengthy list of bridged bisindenyl zirconocenes substituted at the 2,4 position (col. 5-18, example 14). Those of ordinary skill in the art would be motivated to use at least conventional metallocenes and activators, such as those disclosed in Fritze, in the suggested method of Andtsjo, including those claimed, because Andtsjo has stated that the method works well with metallocene catalysts and ionic activators.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Roberto Rábago", with a long horizontal flourish extending to the right.

Roberto Rábago  
Primary Examiner  
Art Unit 1713

RR  
June 13, 2005